

**ABSTRACT OF THE DISCLOSURE**

Disclosed is an automatic regenerable cold/hot water softener comprising a water softening tank having ion exchange resin and a regenerating tank filled with regenerating substance of the ion exchange resin. The water softener controls water softening mode for receiving raw water and discharging soft water using one switching valve, a direct water mode for discharging raw water itself, a regeneration mode for regenerating ion exchange resin, and a intermittence mode for intermitting the inflow and outflow of the raw water and the soft water. The precise regeneration time of the ion exchange resin is judged according to the used amount of the soft water by a temperature sensor and a flow meter for sensing temperature and flux of supply raw water. The regeneration is automatically prosecuted by a control part having a microprocessor. Enough cold/hot soft water can be supplied according to season or need of a user. The cold/hot water softener serves a user's convenience in that sudden change of temperature is prevented.